

REMARKS

Claims 1-16 are currently pending in the application. Claims 1-9 are withdrawn. Claim 10 has been amended. Support for this amendment can be found in the as-filed application, for example, in Example 3. No new matter is believed to have been added to the application.

REJECTIONS UNDER 35 U.S.C. § 103

The Office Action has rejected claims 10 and 12-16 under 35 U.S.C. § 103(a), as allegedly being obvious over U.S. Patent No. 5,922,488 to Marucchi-Soos et *al.* (hereinafter “Marucchi”), in view of U.S. Patent Publication 2002/0111267 to Christian et *al.* (hereinafter “the ‘267 publication”). Applicants respectfully disagree for the following reasons.

Marucchi is directed to a platinum dispersed, hydrogen tungsten bronze electrode catalyst. Marucchi fails to disclose an electrode consisting essentially of a hydrogen tungsten bronze based electrocatalyst without a platinum group metal. The ‘267 publication does not teach or suggest the use of a hydrogen tungsten bronze based electrocatalyst as recited in amended claim 10. Neither does the ‘267 publication teach or suggest the use of a tungsten based electrocatalyst for a fuel cell cathode. The Office Action utilizes the ‘267 publication, arguing that the same catalyst can be used in both the anode and cathode of a cell. In fact, the only references in the ‘267 publication to cells comprising the same (platinum) catalyst at the anode and cathode are in paragraphs 0021 and 0022, as comparative examples to the inventive cells. In the ‘267 publication, the inventive cells comprised a tungsten anode catalyst and a platinum cathode. Thus, neither publication teaches or suggests the use of a hydrogen tungsten bronze based electrocatalyst without a platinum group metal. One of skill in the art can readily appreciate that the oxidation and reduction reactions occurring at the anode and cathode, respectively, of a fuel cell are significantly different reactions.

It is not predictable or obvious that an electrocatalyst that proves useful for one reaction will perform at a suitable level, if at all, for the other reaction. Even if the references were combined, the resulting electrocatalyst and performance would not be the same as in the present application.

The combination of Marucchi and the '267 publication does not teach or suggest the invention of claim 10. Accordingly, claim 10 and the claims depending therefrom would not have been rendered obvious by Marucchi and the '267 publication, and this rejection should be withdrawn.

Claim 11

The Office Action has rejected claim 11 under 35 U.S.C. § 103(a), as allegedly being obvious over Marucchi and the '267 publication, further in view of U.S. Patent 5,470,673 to Tseung et al. (hereinafter "Tseung"). Applicants respectfully disagree for the following reasons.

For at least the reasons described above with respect to claim 10, neither Marucchi nor the '267 publication teach or suggest the features of claim 10. The addition of Tseung fails to correct this deficiency. As claim 11 depends from claim 10, it would not have been rendered obvious over the combination of Marucchi, the '267 publication, and Tseung. Accordingly, this rejection should be withdrawn.

CONCLUSION

Applicants respectfully request entry of the amendments and consideration of the remarks herein, and that a Notice of Allowance be issued. Examiner is invited to contact the undersigned if necessary or useful to further prosecution of the application.

A credit card payment is concurrently submitted *via* EFS Web. This amount is believed to be correct; however, the Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 14-0629.

Respectfully submitted,

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